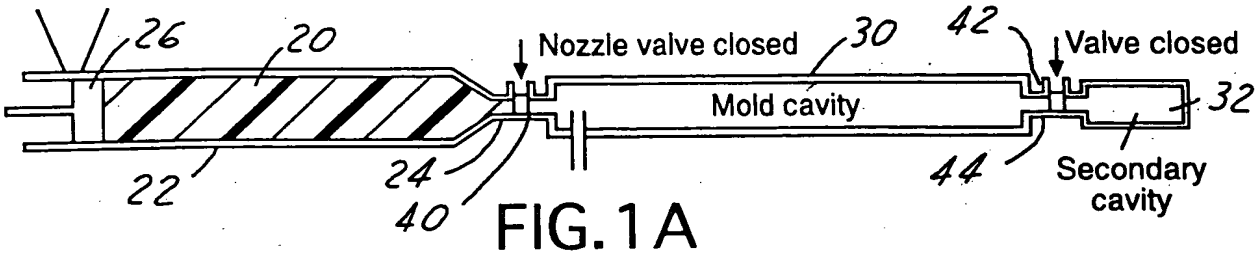


FIG. 1A

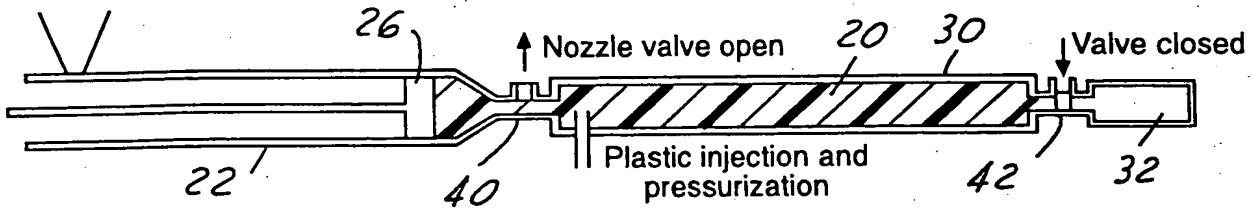


FIG. 1B

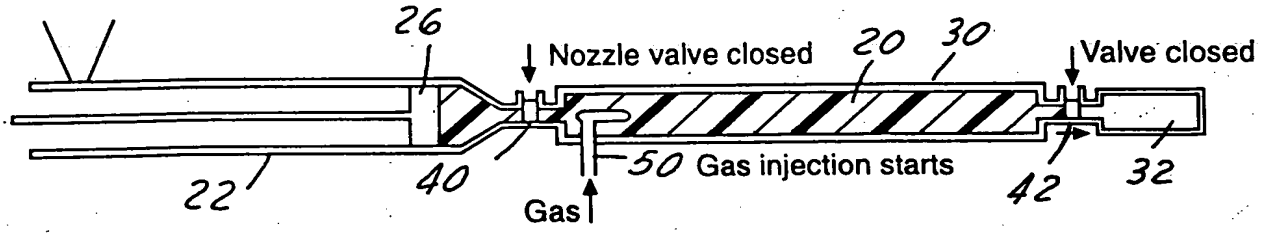


FIG. 1C

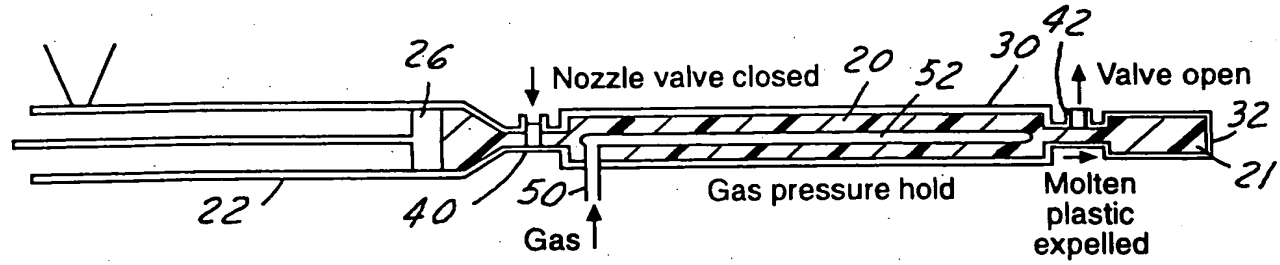
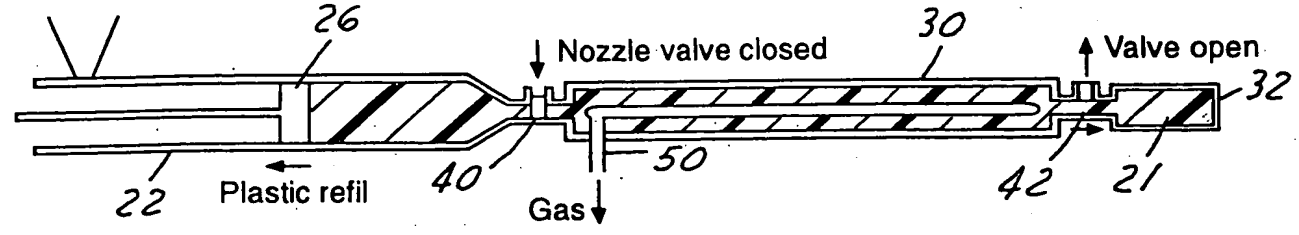


FIG. 1D



10

FIG. 1E

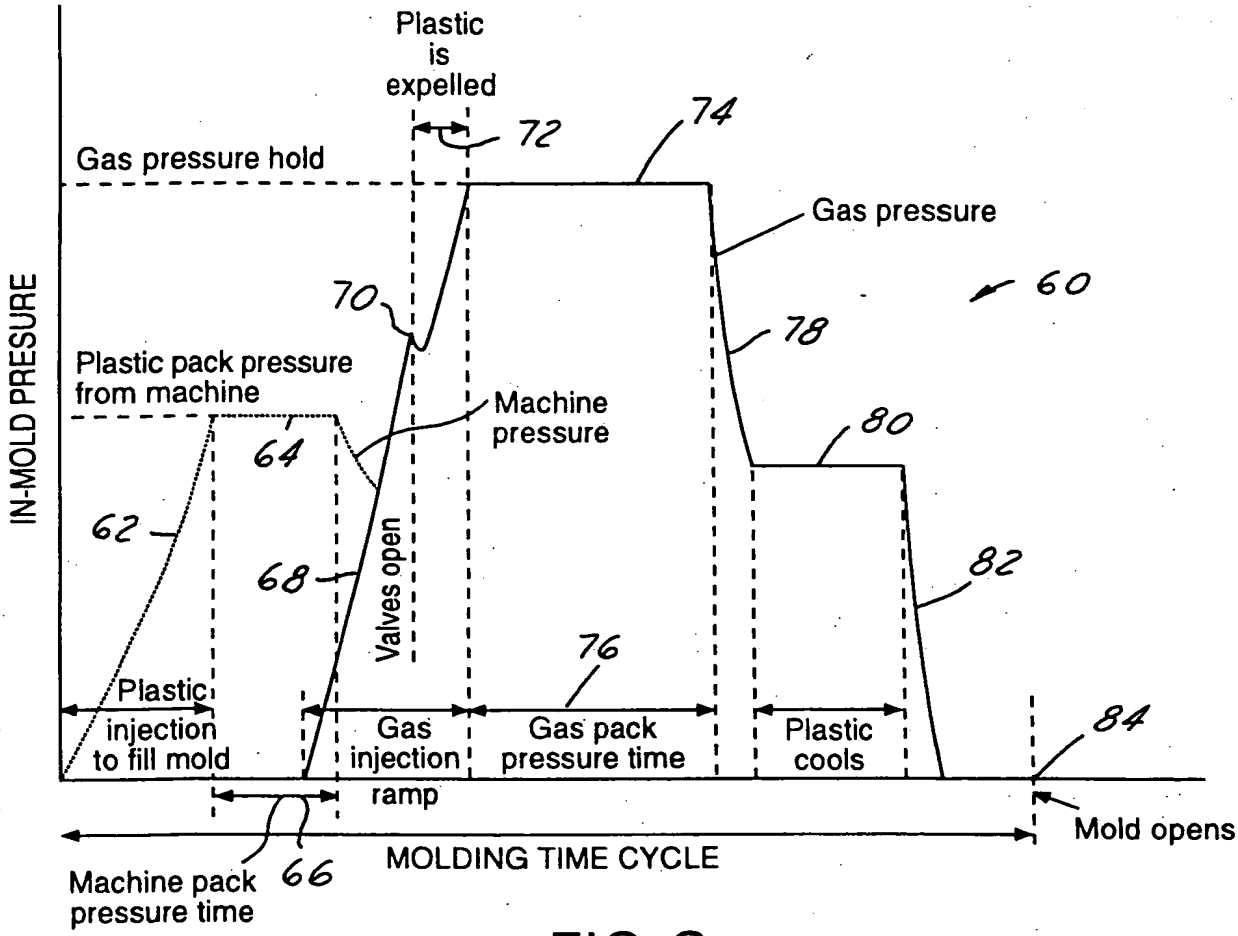

Plastic
is
expelled
72
74
Gas pressure hold
Gas pressure
60
70
78
Plastic pack pressure
from machine
Machine
pressure
80
64
62
68
Valves open
82
76
Plastic
injection
to fill mold
Gas
injection
ramp
Gas pack
pressure time
Plastic
cools
84
Mold opens
IN-MOLD PRESURE
MOLDING TIME CYCLE
Machine pack
pressure time
66

FIG. 2

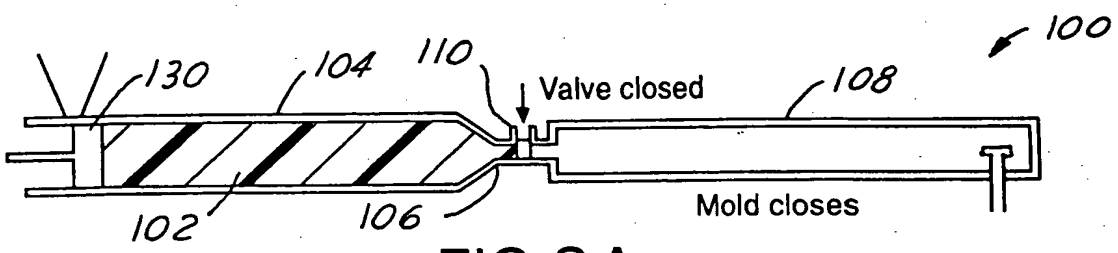


FIG.3A

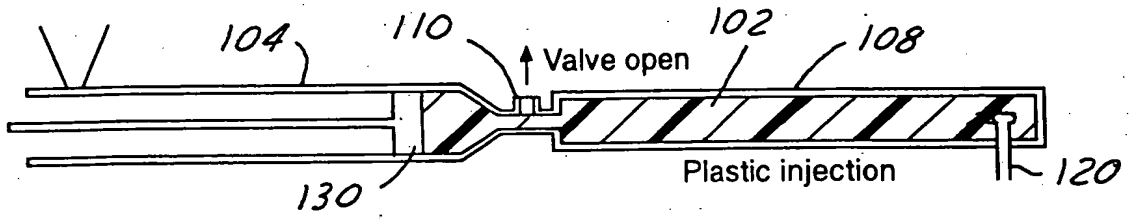


FIG.3B

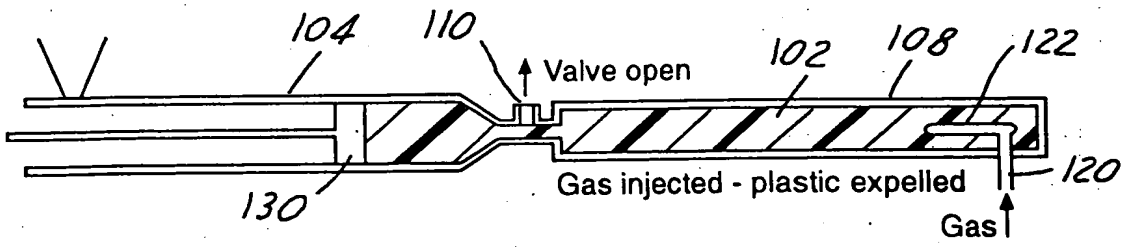


FIG.3C

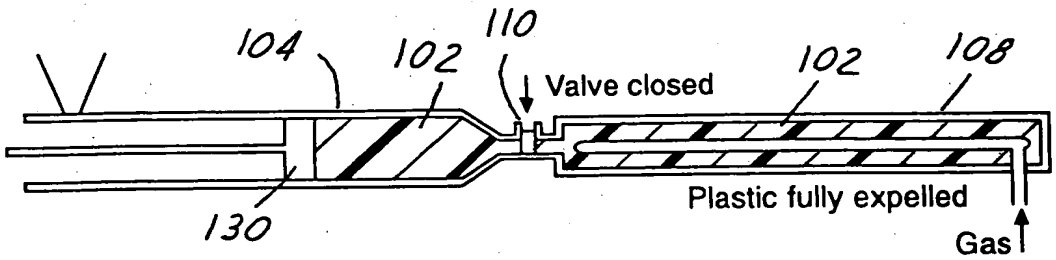


FIG.3D

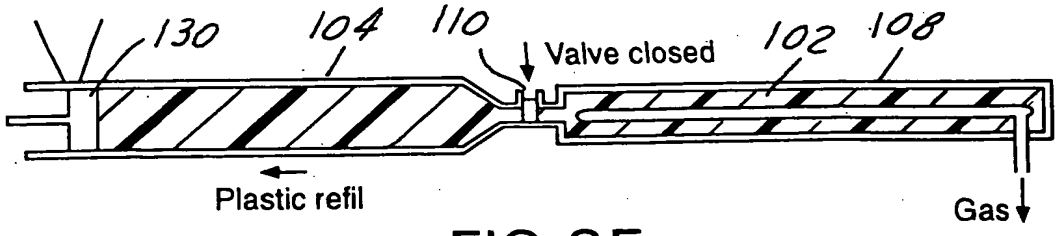


FIG.3E